

## ABSTRACT

In a method for verifying, by a verifier, that a prover has access to a private key associated with a public key  $K_p$ , in which the method comprises the prover generating a random number  $R$  and communicating a disguised form of the random number  $R$  to the verifier, an improvement including the prover generating the random number  $R$  based on an input received from the verifier.

Related apparatus and methods are also provided.